

## **LENSES ON LEARNING ADMINISTRATIVE TRAINING OVERVIEW**

For mathematics reform to take hold nationally and have lasting effects within schools and districts, it will not be enough to change what happens inside classrooms. District and administrative support, on a broad scale, also is needed. Lenses on Learning will enable administrators to investigate how their understanding of the nature of mathematics, learning, and teaching affects their interpretation of administrative practices related to mathematics instruction and how, as an administrator they can become more familiar with the ideas that underlie standards based mathematics education, develop new views of what constitutes supportive administrative practices. Most administrators were educated at a time when the ideas about the nature of mathematics, learning, and teaching were very different than those embedded in standard's based mathematics education reform movement. Lenses on Learning consists of three modules designed to support standards based mathematics. Modules include:

- ***Module 1: Instructional Leadership in Mathematics:*** This four-session module provides a broad overview of the fundamental ideas about mathematics, learning, and teaching on which standards based mathematics education is based. Participants will have the opportunity to: do mathematics together; explore how children's mathematical thinking develops by examining student written work and by viewing a clinical interview with a student; think about the nature of standards based instruction and how it differs from a procedural approach to mathematics education. Participants will also consider some of the norms and values that are embedded in standards based mathematics education and how these connect to school and district culture, and to their own leadership roles.
- ***Module 2: Teacher Learning for Mathematics Instruction:*** This five-session module provides administrators with the opportunity to explore the topic of professional development in their schools. Participants will consider what teachers need to learn - about mathematics, making sense of children's understandings, and facilitating discourse to further mathematical thinking - in order to facilitate substantive mathematical learning for children in the classroom. Participants discuss what makes professional development meaningful for teachers and will be introduced to a variety of ways in which teachers might best be supported to re-conceptualize their mathematics teaching.
- ***Module 3: Observing Today's Mathematics Classroom:*** This four-session module will provide participants with the opportunity to develop an "eye" for standards based elementary mathematics classrooms through observation of real mathematics classroom instruction. Teachers' interaction with children to facilitate the development of their mathematical thinking is assessed. Participants will also be exposed to what approaches to post-observation conferences with teachers that are most constructive for this mathematics model.